

PATENT APPLICATION - DIVISIONAL

METHOD OF USING BASEBALL TRAINING DEVICE

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Title: Baseball Training Device and Method of Using Same

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Cross-Reference to Related Application: Pursuant to 37 CFR 1.53(b), this is a divisional application of U.S. Application Serial Number 10/159,621 filed on May 30, 2002, to which the inventor claims

5 domestic priority, and which is incorporated by reference herein.

BACKGROUND OF THE INVENTION

The present invention generally relates to sports equipment and more specifically to a method of using a device to assist baseball players in achieving a correct form for batting.

It is known that correct batting form requires the batter to properly distribute their weight when
10 preparing to engage the pitched ball. One of the components of proper weight distribution involves the positioning of the batter's feet as the batter prepares to swing and actually swings at the ball. As the ball is delivered by the pitcher, it is commonly known that the majority of the batter's weight should shift to the rear foot. The front foot may actually rise or slightly move forward as the batter shifts weight, but the rear foot should remain planted. As the batter begins to swing, the rear foot should pivot in place
15 without forward movement. This pivoting motion causes the batter's hips to rotate from the original position of facing at a right angle to the pitcher, to a position where the batter's hips are almost facing the pitcher at the point of contact between the ball and the bat. The proper weight distribution allows the batter to deliver a more powerful swing, and also enables the batter to deliver a level swing. Otherwise, the bat may drop, which might cause the batter to miss the ball or deliver a less powerful
20 swing.

The motion of the rear foot is often described by coaches as "crushing the bug," in reference to a rotational motion that might be used for killing an insect with one's foot.

Different inventions have been proposed for achieving the correct pivoting technique. For example, U.S. Patent No. 5,318,290 discloses a baseball swing training apparatus comprising a base
25 unit, an anchor unit, a pivot unit, a platform unit and a releaseable foot engaging unit. The device disclosed in the '290 patent requires the setting of anchors to secure the device to the ground or other supporting surface, and also requires the batter to secure his or her foot to the platform unit with a "foot securing unit." In addition, the device disclosed in the '290 patent is designed for the platform member

to “rotate freely relative to the base member.” The device disclosed in the ‘290 patent utilizes a single pivot member to connect the base member to the platform member.

There are several disadvantages presented by the device disclosed in the ‘290 patent. By way of example only, among some of the disadvantages are the following: (1) the device requires
5 preparation insofar as the base unit must be properly anchored to the ground, which may include deploying the device in a recess or hole in the ground; (2) once the device has been anchored, the player must secure his or her foot to the platform unit; (3) because the platform member is designed to rotate freely with respect to the base member, the sensation the batter experiences while practicing with the device is different from the sensation of rotating the rear foot on the ground itself; (4) the single pivot
10 member utilized by the device for rotation may lock up over time, so the platform no longer rotates as required; and (5) given the anchors and foot straps, the device is necessarily large and not easily transported within a player’s equipment bag for individual training.

A need exists for a batting training device, and a method of using the same, which requires no significant preparations to use, which provides an accurate sensation of the required motion, which is
15 small enough to be readily carried in a player’s gear bag along with the player’s other equipment, and which is inexpensive enough to be readily affordable by every aspiring baseball player.

SUMMARY OF THE INVENTION

The present invention is directed to a method of using a batting training device which meets the
20 needs identified above.

The disclosed batting training device comprises an integrated pivoting unit, the pivoting unit comprising a first flange and a second flange in facing relation, the first flange pivotally attached at its center to the center of the second flange, a bearing housing defined where the first flange is pivotally attached to the second flange for holding ball bearings, the first and second flange each having outward
25 facing surfaces. A foot-engaging member is attached with fastening means to the outward facing surface of the first flange and a ground-engaging member is attached with fastening means to the outward facing surface of the second flange. A sealing member encircles the attachment surface. The method of training comprises placing a first foot on the device, assuming a batting stance, placing the

second foot approximately a shoulder's width apart from the first foot. As the batter anticipates the pitched ball, the batter shifts weight so that the majority of the batter's weight is supported by the first foot, which is resting on the device. The batter swings the bat and simultaneously rotates the first foot on the device without lifting the first foot, so that the batter's hips rotate in the same direction as the bat, as the batter completes the swing.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG.1 is a perspective view of the apparatus utilized in the disclosed method.

FIG.2 is a side view of the disclosed apparatus.

FIG.3 is top view of one embodiment of the disclosed apparatus.

FIG.4 is an exploded view of the disclosed apparatus.

FIG.5 shows placement of the apparatus beneath a batter's foot.

FIG.6 shows how a batter might place the device when assuming a batting stance.

DETAILED DESCRIPTION OF THE EMBODIMENTS

Referring now specifically to the drawings, FIG. 1 shows a perspective view of the disclosed device 10 to be employed with the method claimed herein. The device comprises a foot-engaging member 12, an integrated pivoting unit 14, a lower ground-engaging member 16, a sealing member 18, and fastening means 20 for respectively attaching the foot-engaging member 12 and the ground-engaging member 16 to the integrated pivoting unit 14. The foot-engaging member 12 has two sides, being first surface 12a and second surface 12b. Likewise, ground-engaging member 16 has two sides, being first surface 16a and second surface 16b.

Cover material 22 may be applied to the second surface 12b of foot-engaging member 12 and to the second surface 16b of ground engaging member 16, the cover material being of the type which provides additional friction so the user's foot 24 is less inclined to slip or the device more firmly engages the ground 26. Fastening means 20, such as rivets or nuts and bolts, are used to attach foot-engaging member 12 to integrated pivoting unit 14. Likewise, fastening means 20 are used to attach ground-engaging member 16 to the integrated pivoting unit 14. Glue or other acceptable adhesive may be used to attach cover material 22 to the second surface 12b of the foot-engaging member 12 and to the

second surface 16b of the ground-engaging member 16. In addition, fastening means 20 may also penetrate cover material 22 to provide further means of fastening of the cover material to the foot engaging member 12 and the ground-engaging member 16. Cover material 22 might be textured to increase the friction between the batter's foot 24 and the foot-engaging member 12.

5 The integrated pivoting unit 14 comprises a first flange 28a and a second flange 28b, which are in facing relation. The first flange 28a is pivotally attached at its center to the center of the second flange 28b, enclosing ball bearings. A bearing housing 30 is defined where the first flange 28a is pivotally attached to the second flange 28b. The first flange 28a and second flange 28b each have outward facing surfaces to which are respectively attached the first surface 12a of the foot-engaging
10 member 12 and the first surface 16a of the ground-engaging member 16.

 It will be appreciated that the top of the device, as shown in FIG. 3, may be a mirror image of the bottom, so that it does not matter which side is facing up. In other words, there may be no difference between the foot-engaging member 12 and the ground-engaging member 16. The foot-engaging member 12 and the ground-engaging member 16 may be round in shape and may have the
15 same diameter. These members may be sized so the diameters are the same width or wider than the ball of the foot of the user. It has been found that a suitable diameter of the members is from 3.5 inches to 6.0 inches. This range of diameters allows for easy storage of the device in a gear bag, but is also large enough to provide sufficient support for the player's foot 24.

 This feature of the device allows a young ballplayer to simply drop the device on the ground
20 without regard to which side is facing up. As shown in the exploded view of FIG. 4, the integrated pivoting unit 14 is sandwiched between the foot-engaging member 18 and the ground-engaging member 16. Integrated pivoting unit 14 is available from most hardware supply stores as a single piece unit, typically used for such uses as pivotally mounting wheel casters to furniture. Sealing member 18 may be a rubber o-ring or other elastic member which is sized so that it is able to be stretched over one of
25 the flanges 28a or 28b of the integrated pivoting unit 14, yet small enough that it snugly fits around the bearing housing 30 defined where the first flange 28a is pivotally attached to the second flange 28b. Among other functions, sealing member 18 keeps dirt and debris away from the bearing housing 30 so no dirt or debris gets between the bearings keeping flanges 28 free to move with respect to one

another. Sealing member 18 also adds additional friction so that flanges 28 do not freely spin, thereby causing the sensation of rotating the foot on the device to resemble to a greater degree the sensation of rotating the rear foot on the ground itself. Yet, when weight is placed on the device and the rear foot rotated, the flanges 28 spin in such a manner as to convey to the batter proper batting posture and technique.

The method of training comprises the batter placing a first foot 24 on the device 10. The batter assumes a batting stance, placing their second foot 32 approximately a shoulder's width apart from the first foot 24, and cocking the bat 34 above the shoulder 36 corresponding with the first foot 24. The batter shifts his or her weight so that the majority of the batter's weight is supported by the first foot 24. The batter swings the bat 34, while simultaneously rotating the first foot 24 on the device 10, which pivots as the foot rotates. However, although the first foot 24 is rotated, it is not moved off of the device during the swing. Rotating the first foot 24 in this manner causes the batter's hips 38 to rotate in the same direction as the bat, such that the hips rotate approximately 90 degrees.

While the above is a description of various embodiments of the present invention, further modifications may be employed without departing from the spirit and scope of the present invention. For example, the size, shape, and/or material of the various components may be changed as desired. Thus the scope of the invention should not be limited by the specific structures disclosed. Instead the true scope of the invention should be determined by the following claims.